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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,488	09/07/2001	Michael G. Lamming	D/A0849	4150

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EXAMINER

GOLD, AVI M

ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/682,488

Applicant(s)

LAMMING ET AL.

Examiner

Avi Gold

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/6/04, 4/20/04, 2/4/02, 11/26/01</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is responsive to the application filed September 7, 2001. Claims 1-26 are pending. Claims 1-26 represent a method and apparatus for controlling document service request using a mobile computing device.

Specification

1. The disclosure is objected to because of the following informalities: status of related applications needs to be updated. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-15 and 17-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Lamming et al., U.S. Patent No. 5,862,321.

Lamming teaches the invention as claimed including a system for transferring electronic documents between portable computer devices, and between such devices and various forms of office equipment (see abstract).

Regarding claim 1, Lamming teaches a method for controlling a document service request at a mobile computing device, comprising:

initiating, at the mobile computing device, the document service request that includes a first parameter identifying a document accessible to a document server (col. 3, lines 36-40, Lamming discloses a file server sending documents to a portable electronic device, also called TAB);

obtaining, at the mobile computing device, device information identifying a type of output device available over one of two communications channels (col. 10, lines 38-49, Lamming discloses an available printer, fax, etc... to print out documents from the portable electronic device);

adding, at the mobile computing device, the device information as a second parameter to the document service request (col. 9, lines 19-27, Lamming discloses print operation instruction attached to a document of a persons TAB);

transmitting, from the mobile computing device, the parameters of the document service request to the document server over one of the two communications channels (col. 9, lines 64-67, col. 10, lines 1-3, Lamming discloses a document request for printing set to a file server and then printed out); and

controlling, at the mobile computing device, a connection between the document server and the output device to transmit there between the document in a format suitable for the output device (col. 4, lines 50-56, Lamming discloses the user of a proper format, for eventual transfer, on the server);

the mobile computing device establishing the connection with the document server over a first of the two communications channels and with the output device over a second of the two communications channels (col. 3, lines 36-40, col. 10, lines 38-49).

Regarding claim 2, Lamming teaches the method according to claim 1, wherein the document server and the output device have no preexisting communications channel there between (col. 3, line 67, col. 4, lines 1-5, Lamming discloses a document handling subsystem communicating with many output devices).

Regarding claim 3, Lamming teaches the method according to claim 1, wherein the document server and the output device have an inadequate preexisting communications channel there between (col. 3, line 67, col. 4, lines 1-5).

Regarding claim 4, Lamming teaches the method according to claim 1, wherein the document server prepares the document identified by the first parameter in the format suitable for the output device (col. 3, lines 36-40, col. 4, lines 50-56).

Regarding claim 5, Lamming teaches the method according to claim 4, wherein the suitable format prepared by the document server conforms to at least one format that the output device is adapted to process (col. 4, lines 50-56).

Regarding claim 6, Lamming teaches the method according to claim 4, wherein the document server applies one of a document enrichment, translation, conversion, summarization, recommender service to the document before preparing the document in the suitable format (col. 9, lines 28-33, Lamming discloses a document going through a summarizing and translation service).

Regarding claim 7, Lamming teaches the method according to claim 1, wherein the mobile computing device sets up a route between the document server and the output device (col. 9, lines 64-67, col. 10, lines 1-3).

Regarding claim 8, Lamming teaches the method according to claim 1, wherein the output device is one of a printer, a display, a file server, and a speaker (col. 3, line 67, col. 4, lines 1-5).

Regarding claim 9, Lamming teaches the method according to claim 1, wherein the format suitable for the output device is a device dependent format (col. 4, lines 50-56).

Regarding claim 10, Lamming teaches the method according to claim 1, wherein the first of the two communications channels is an unlimited communications channel and the second of the two communications channels is a limited communications channel (col. 11, lines 34-38, Lamming discloses the use of GSM; col. 5, lines 29-35,

Lamming discloses IR used to send documents between the document handling subsystem and TAB).

Regarding claim 11, Lamming teaches the method according to claim 10, wherein the two communications channels are wireless communications channels (col. 11, lines 34-38, col. 5, lines 29-35).

Regarding claim 12, Lamming teaches the method according to claim 10, wherein the limited communications channel is a wired communications channel and the unlimited communications channel is a wireless communications channel (col. 11, lines 34-38, col. 5, lines 41-43, Lamming discloses the use of a wired link for communicating).

Regarding claim 13, Lamming teaches the method according to claim 1, wherein the first and the second of the two communications channels are limited communications channels (col. 5, lines 29-35).

Regarding claim 14, Lamming teaches the method according to claim 1, further comprising processing the document service request at the document server by:

locating the document identified by the first parameter of the document service request (col. 3, lines 36-40);

loading a driver corresponding to the device information specified in the document service request (col. 3, lines 36-40, col. 9, lines 13-19);

rendering the located document using the loaded driver (col. 9, lines 13-19, Lamming discloses an electronic document fetched from a database);

storing the rendered document in a print file (col. 9, lines 20-27, Lamming discloses a print operation deferred and stored on TAB); and

transmitting the print file to the mobile computing device over the first of the two communications channels (col. 9, lines 22-27).

Regarding claim 15, Lamming teaches the method according to claim 1, further comprising applying one or more specified service to the document as part of the document service request; wherein the one or more specified services is one of a summarization service, an enrichment service, a recommender service, and a translation service (col. 9, lines 28-33).

Regarding claim 17, Lamming teaches the method according to claim 1, wherein the mobile computing device transforms the document into the format suitable for the output device (4, lines 50-56).

Regarding claim 18, Lamming teaches the method according to claim 1, wherein the device information is obtained by executing a discovery request at the mobile computing device (col. 9, lines 22-27, Lamming discloses a sensing of the Picador).

Regarding claim 19, Lamming teaches the method according to claim 1, wherein the device information is obtained using a profile of the output device and confirmed by executing a discovery request at the mobile computing device (col. 9, lines 22-27).

Regarding claim 20, Lamming teaches the method according to claim 1, wherein one of the first of the two communications channels and the second of the two communications channels of the mobile computing device is routed through a second mobile computing device having at least two communications channels (col. 10, lines 4-8, Lamming discloses a file transferred from Ann to Bob and then to a printer).

Regarding claim 21, Lamming teaches the method according to claim 1, wherein the document server forms part of an input device (col. 3, lines 36-40, Lamming discloses the exchange of documents involving a file server).

Regarding claim 22, Lamming teaches the method according to claim 1, wherein device information identifying the type of output device available over the first communications channel is a class of service (col. 9, lines 22-27, Lamming discloses the TAB sensing the Picador).

Regarding claim 23, Lamming teaches the method according to claim 22, wherein the class of service is wireless printing (col. 9, lines 22-27, Lamming discloses the IR communication to the printer).

Regarding claim 24, Lamming teaches the method according to claim 1, wherein the first parameter and the second parameter are specified using a name of the document (col. 7, lines 18-20, Lamming discloses that information transmitted includes a document name).

Regarding claim 25, Lamming teaches an article of manufacture, comprising:
a storage medium (col. 5, lines 44-58, Lamming discloses TAB); and
program instructions stored on the storage medium for controlling a document service request on a mobile computing device having a processor; the processor in executing the program instructions (col. 5, lines 44-58, col. 3, lines 36-40, col. 10, lines 56-58, Lamming discloses TAB having a processor which executes instructions):

initiating, at the mobile computing device, the document service request that includes a first parameter identifying a document accessible to a document server (col. 3, lines 36-40);

obtaining, at the mobile computing device, device information identifying a type of output device available over one of two communications channels (col. 10, lines 38-49);

adding, at the mobile computing device, the device information as a second parameter to the document service request (col. 9, lines 19-27);

transmitting, from the mobile computing device, the parameters of the document service request to the document server over one of the two communications channels (col. 9, lines 64-67, col. 10, lines 1-3); and

controlling, at the mobile computing device, a connection between the document server and the output device to transmit there between the document in a format suitable for the output device (col. 4, lines 50-56);

the mobile computing device establishing the connection with the document server over a first of the two communications channels and with the output device over a second of the two communications channels (col. 3, lines 36-40, col. 10, lines 38-49).

Regarding claim 26, Lamming teaches a mobile computing device for controlling a document service request, comprising:

a memory for storing program instructions (col. 10, lines 53-55, Lamming discloses instructions stored in TAB memory); and

a processor for executing the program instructions stored in the memory; the processor in executing the program instructions (col. 10, lines 53-55, Lamming discloses a processor for executing instructions in TAB memory):

initiating, at the mobile computing device, the document service request that includes a first parameter identifying a document accessible to a document server (col. 3, lines 36-40);

obtaining, at the mobile computing device, device information identifying a type of output device available over one of two communications channels (col. 10, lines 38-49);

adding, at the mobile computing device, the device information as a second parameter to the document service request (col. 9, lines 19-27);

transmitting, from the mobile computing device, the parameters of the document service request to the document server over one of the two communications channels (col. 9, lines 64-67, col. 10, lines 1-3); and

controlling, at the mobile computing device, a connection between the document server and the output device to transmit there between the document in a format suitable for the output device (col. 4, lines 50-56);

the mobile computing device establishing the connection with the document server over a first of the two communications channels and with the output device over a second of the two communications channels (col. 3, lines 36-40, col. 10, lines 38-49).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lamming further in view of Wang et al., U.S. Patent No. 6,493,551.

Lamming teaches the invention substantially as claimed including a system for transferring electronic documents between portable computer devices, and between such devices and various forms of office equipment (see abstract).

As to claim 16, Lamming teaches the method of claim 1.

Lamming fails to teach the limitation further including recording the document service request for accounting purposes at the mobile computing device.

However, Wang teaches a GSM MOU bypass for delivering calls to GSM subscribers roaming to CDMA networks (see abstract). Wang teaches the use of collecting billing information (col. 9, lines 10-20).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Lamming in view of Wang to record the document service request for accounting purposes at the mobile computing device. One would be motivated to do so because it allows for a proper bill to be provided to a user.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Pat. No. 6,701,378 to Gilhuly et al.

U.S. Pat. No. 6,233,058 to Park

U.S. Pat. No. 6,611,358 to Narayanaswamy

U.S. Pat. No. 6,477,565 to Daswani et al.

U.S. Pat. No. 6,336,142 to Kato et al.

U.S. Pat. No. 6,553,240 to Dervarics

U.S. Pat. No. 6,201,611 to Carter et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Avi Gold whose telephone number is 571-272-4002.

The examiner can normally be reached on M-F 8:00-5:30 (1st Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

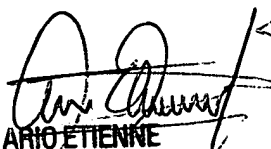
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Avi Gold

Patent Examiner

Art Unit 2157

AMG


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